

Appendix D: Unit Questions and Answers

Unit 2: Identify the Hazards

1. What does darker shading indicate?
 - A. Greater risk
2. On the top map, what do the numbers in the middle of the blocks mean?
 - A. They indicate the panel that shows detail of that area.

Identify on Pp. 10-11:

3. The meaning of the numbers “8, 9, and 10” beside the wavy lines
 - A. They indicate the base flood elevation level in feet at the marked areas. Because the elevation varies along the watercourse, each number beside a wavy line is an interpolation from the cross section readings, not a directly measured reading.
4. The areas:
 - A. At greatest risk - those with darker shading, especially Zones AE, the floodway and between EL 8 and EL 9, and VE, EL 9
 - B. At less risk - The lighter tinted areas: Zone X
 - C. At minimal risk - Zone X unshaded
 - D. At unknown risk - Tricky question because Zone D is not shown on this map; however, Zone X unshaded is also unknown because the map does not indicate land contours.
5. The meaning of the hatched lines in the Hackberry Draw and the consequences for a resident whose home is there
 - A. The hatched lines (P. 14) mean the home is in the floodway area, so the home is at high risk of flooding or severe damage.
6. The risk to Zone X areas at the top left which are untinted vs. those also in Zone X which are tinted
 - A. The risk to the untinted zone is indeterminate because the map does not show land contours; the tinted zone is in the 500-year floodplain, or the 100-year floodplain with risk of flooding up to a foot, or an area protected by a levee.
7. A Coastal Barrier area
 - A. Zone VE (bottom center) with the cross-hatching.
8. The risk associated with the area left of the marked “Limit of Floodway”
 - A. It is marked Zone AE, EL 8, so the risk to 8 feet elevation is high.

Unit 2: Identify the Hazards - Continued

9. How do you get a FIRM?
 - A. P. 2: You can look at a map at your local community map repository site, such as your local planning, zoning or engineering office. You can also order a FIRM from FEMA. (P. 20 explains the procedures.)
10. Is a FIRM free?
 - A. P. 20 No, there is a nominal fee.
11. If you want flood risk information for a large city or county, how many maps will you need? How can you find out?
 - A. P. 20 Review the current Flood Map on file at your local community map repository; request from FEMA a copy of the Flood Map index to identify the panels you need.
12. What is the date of the map's information?
 - A. 1998
13. What does the 6-digit number "370168" signify?
 - A. The community's number
14. What do the numbers after that 6-digit number signify?
 - A. The panel number
15. What number do you need for the map showing Routes 40 and 17, the Murrayville and Kings Grant Tributaries and Pages Creek?
 - A. 370168 0045 E
16. What is its date?
 - A. 1992
17. Is the NFIP available for residents in this area?
 - A. At the bottom of each FIRM is information about how to find out if this program is available in this community.
18. For Murrayville Road at the left edge (middle) of the map. If there are any homes on that road in the floodplain, are some at greater risk than others?
 - A. The road runs through Zones C unshaded, B and A. The homes in Zone A in the 100-year floodplain are at high risk; those in Zone B, the 500-year floodplain, are at medium risk. In Zone C unshaded, outside the 500-year floodplain, the risk is indeterminate because the map does not show land contours. You can assess the risk only after visiting the property.
19. Find location 1 on the map. What is its hazard?
 - A. It's in Zone B, the 500-year floodplain, so its risk is medium.

Unit 2: Identify the Hazards – Continued

20. What about the hazard for location 2

A. It's in Zone A, so has high risk.

21. What is the hazard for location 3, in the upper middle section of the map, in Zone C, far from marked flood zones? Can you safely assume that site is safe from flooding?

A. No, every area faces potential flooding. Also, the map does not show topography; this area could be a plain where water could back up or contain a creek or underground stream. You can assess the risk only after visiting the property.

22. What is the hazard for location 9? Because the surrounding areas are designated Zone A10, EL 11, can you assume location 9 is fairly safe because it is marked Zone C?

A. No, because you do not know exactly how far above the floodplain they are. Everyone is at risk for flooding, so homeowners should buy flood insurance. You can assess the risk only after visiting the property.

23. Location 5

A. Location 5 is in Zone C unshaded. Its risk is the same as for location 3.

24. Location 7

A. Location 7 is in Zone C unshaded. Its risk is the same as for location 3.

25. Location 8

A. Location 8 is in Zone C unshaded. Its risk is the same as for location 3.

26. Location 10

A. Location 8 is in Zone C unshaded. Its risk is the same as for location 3.

27. What effect does the hatching have on the orange section in western Virginia and North Carolina?

A. The map does not indicate what additional risk is added. Because the section is orange, you might assume the risk level is medium high, with additional information about the specific kind of risk noted.

28. What is the wind risk in Tulsa, OK?

A. Red indicates high risk.

29. What is the wind risk in Kansas City, MO?

A. Red indicates high risk.

30. What is the wind risk in Oakland, CA?

A. White indicates low risk.

31. What is the wind risk in Wilmington, NC?

A. Orange indicates medium risk, and it is in a hurricane-susceptible region.

Unit 2: Identify the Hazards – Continued

32. What is the earthquake risk in Tulsa, OK?

A. Blue indicates low risk.

33. What is the earthquake risk in Kansas City, MO?

A. White indicates low risk.

34. What is the earthquake risk in Oakland/San Francisco, CA?

A. Red indicates high risk.

35. What is the earthquake risk in Wilmington, NC?

A. It seems to be medium because the color is green, but it could be low because the blue is very near.

36. What is the fire risk in Tulsa?

A. Medium (8 months)

37. What is the fire risk in Kansas City, MO?

A. Medium (5 months)

38. What is the fire risk in Oakland/San Francisco, CA?

A. Low (2 months)

39. What is the fire risk in Wilmington, NC?

A. Medium (9 months are colored, but two are yellow, so the tally is 8)

Unit 3: Recognize the Risks and Mitigation Measures

Answers for the exercises are included in the unit.

Unit 4: Integrate Cost Information and the WAP

1. Which risks are highest for **Tulsa**?

A. Wind and fire (The Relative Risk Levels Table shows Tulsa has high risk for wind and medium for fire, but low for flood and earthquake.)

On your Action Checklist for the hazards you checked:

2. What would be the total cost to implement all those measures? Include any donated services/materials available.

A. Answers will vary.

3. Does the total cost exceed your budget?

A. Answers will vary.

4. Which risks are highest for **Kansas City**?

A. Flood and wind (The Relative Risk Levels Table shows Kansas City has high risk for flood and wind, but low for earthquake and medium for fire.)

On your Action Checklist for the hazards you checked:

5. What would be the total cost to implement all those measures? Include any donated services/materials available.

A. Answers will vary.

6. Does the total cost exceed your budget?

A. Answers will vary.

7. Which risks are highest for **SF/Oakland**?

A. Earthquake (The Relative Risk Levels Table shows SF/Oakland has high risk for earthquake, but low for flood, wind and fire.)

On your Action Checklist for the hazards you checked:

8. What would be the total cost to implement all those measures?

A. Answers will vary.

9. Does the total cost exceed your budget?

A. Answers will vary.

10. How will you determine where to concentrate your recommendation when the relative risk rankings are very similar?

A. Look for the most effective benefits, using the criteria to protect first against risk to life and then to property. For property, emphasize enhancing the building integrity of the home, except for fire, when you need to emphasize keeping fire away from the home.

Unit 4: Integrate Cost Information and the WAP – Continued

On your Action Checklist for all four hazards:

11. What is the total cost to implement all your recommended measures?

A. Answers will vary. Choosing any mitigation measures that you checked on your Unit 3 Action Checklist is correct.

12. Does the total cost exceed your budget?

A. Answers may vary.

Final Exercise

13. What mitigation measures will you recommend for this home? (In Wilmington, NC)

A. Because flood has the only “high” rating, recommendations should focus on that hazard.

14. Why?

A. Answers may vary, but the recommendations must be:

- Among the flood mitigation measures checked on the Action Checklist from Unit 3
- Adhere to budget guidelines
- Maximize the programs’ effectiveness to benefit homeowners